

THE ART OF ARCHITECTURE WAYFINDING: NAVIGATING BY OBJECTS, BOUNDARIES, AND TIME

Agung DWIYANTO ¹, Arnis Rochma HARANI ^{1✉}, Intan BISYARAH¹, Fariz HIRZAN²

¹*Department of Architecture, Diponegoro University, Semarang, Indonesia*

²*School of Design, RMIT University, Melbourne, Australia*

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Abstract. The purpose of this paper is to explore various forms of wayfinding through spatial reading. In particular, this article emphasizes how hidden clues play an important role in human movement and the wayfinding process. The purpose of this paper is to highlight hidden clues that are crucial to understanding architectural spatiality as a process of wayfinding. A film that contains a wayfinding narrative will be dismantled in this paper to explore various the arts of wayfinding. The selection of the films was based on the possibility of spatial reading, especially those that reflect the story of human movement and the wayfinding process. The analysis is based on observations of the film, particularly how spatial settings are compiled and used to wayfinding clues as the observed data. The data was collected by observing the actors about their wayfinding strategies. Using catalogs and diagrams, the results of the data were analyzed to obtain a spatial picture of wayfindings. Three aspects of hidden clues determine a person's wayfinding, namely objects, boundaries, and time. In terms of wayfinding, these three aspects may be considered outside of the physical form of architectural space. The results of the study contribute to the development of an architectural wayfinding system based on spatial narratives.

Keywords: wayfinding, spatial reading, spatial narrative, architectural elements, interpretation.

✉Corresponding author. E-mail: arnisrochmaharani@lecturer.undip.ac.id

1. Introduction

The purpose of this paper is to explore various methods through spatial reading in the wayfinding process, in particular, the presence of hidden clues as a search method. Architectural wayfinding has so far been closely related to the presence of signs that provide users with information (Lynch, 1960). In addition, Downs and Stea (1977) propose that wayfinding begins with a basic understanding of orientation. The information related to orientation is the first thing that needs to be understood before someone can perform wayfinding. The wayfinding process is conceptualized as decision making, action, and information processing (Passini, 1984). Wayfinding is a system that facilitates navigation and orientation of users in their physical environment.

Wayfinding refers to the method by which humans locate roads and places (Passini, 1984; Passini & Proulx, 1988; Weisman, 1981). The act of searching for a place or finding a way involves cognitive and spatial abilities. To achieve a particular goal, a person uses cognitive skills in absorbing, remembering, and utilizing information from their surroundings (Mustikawati et al., 2018). Tuan (2011) defines spatial ability as the ability to interact with and control space. Wayfinding in architecture is therefore im-

portant since it is related to the reading of space and the treatment of space. The presentation of various wayfinding processes through spatial reading enhances architectural discussions, especially when it comes to determining orientation and circulation, which includes spatial arrangement.

According to Heft's book, Waller and Nadel (2013), wayfinding is a perception-action process that involves directed and organized actions, as well as the processing of information and direct action. Consequently, understanding how a person reads their environment will enable goal-finding actions to be directed and organized. A person uses clues from the surrounding environment when looking for a destination, when wayfinding is related to navigation (Lynch, 1960; Mustikawati et al., 2017). A wayfinding process can be traced through a variety of conditions involving spatial arrangement and perception-action (Mustikawati et al., 2018). The setting in the film can be used as a wayfinding process to explain how someone finds their destination.

This paper examines the wayfinding process with a focus on reading spatial narratives containing hidden clues, through the use of a film. In addition to providing information about the wayfinding process, films can also be used to convey information regarding how a space

is portrayed and understood by its actors as a result of its narration and interpretation (Bruno, 2007; Mohamed, 2023). Furthermore, discussions about reading architecture through film have been discussed about spatial narrative (Bruno, 2007; Hasila et al., 2020; Mohamed, 2023) to reveal the actors involved in wayfinding in the film, it is necessary to read the hidden clues in the spatial settings.

By examining the film “Old” as a case study, this article reveals a variety of techniques for wayfinding through spatial reading. This paper examines hidden clues in understanding architectural spatiality as a wayfinding process, arguing that the film *Old* provides a means to reveal the hidden clues, as the characters in the film attempt to navigate unfamiliar and limited spaces. Architecture and wayfinding in this film serve as symbols of the characters’ search, confusion, and entrapment as a result of the distortion of time that occurs. This film is not an explicit film about architecture, but the use of space and the way the characters interact with time create a narrative about how one navigates the environment.

This paper has the potential to expand architectural wayfinding knowledge related to spatial narratives. This is especially how an environment is understood as part of an action. This finding allows it to be used as a development of architectural wayfinding, which has so far been based on physical form and emphasizes spatial visibility.

2. Methodology

This study uses a qualitative interpretive approach to investigate a phenomenon in the field (Creswell & Creswell, 2018). A single case study method is used in this study to examine the *OLD* film as the case observed. This case study was selected based on the storyline developed by the *OLD* film director in describing the various ways in which the actors navigated the various wayfinding processes. In other words, this film has the potential to demonstrate how hidden clues play a significant role in the process of wayfinding. *OLD* is selected using a purposive sampling approach, specifically selecting objects that are most suitable for the study (Creswell, 2009).

Specifically, this research focuses on how a spatial narrative is narrated as a wayfinding search process. Accordingly, the *OLD* film illustrates a limited, isolated, and filled with critical spatial elements that influence the wayfinding behavior, navigation, and spatial experience of its characters, thus making it relevant for wayfinding analysis in an architectural setting. In contrast, Lucas (2016) demonstrated that films can be used as a data source in architectural research because they provide a visual and narrative representation of spatial experiences. This study was conducted using the *OLD* film because it possesses a wealth of spatial representations that lend support to the research. Diagrams are used in this study to analyze the data, especially in navigating wayfinding and reading actors.

Data were collected using the visual observation method of the film, i.e., watching the film repeatedly and mapping the relevant spatial elements. According to Lucas

(2016), visual analysis is a technique for reading spatial narratives and phenomena of spatial experience from visual media. The documentation process involves recording key scenes, drawing spatial sketches, and taking screenshots for further analysis. Accordingly, this approach follows Creswell’s principle of “thick description” (Creswell, 2009), which is to describe in detail the context and actions observed. Based on observations, a conceptual map of the beach setting in the *OLD* film was developed. It aims to reconstruct the spatial relationships between elements and to demonstrate how spatial configuration affects the experience of wayfinding. By using this technique, the results of content analysis can be visualized and clarified.

A spatial mapping analysis is performed by creating a sequence of movements to identify the hidden clues in the film. In architectural research, mapping is done using architectural diagrams; this diagram allows it to be used as a spatial analysis method (Harani et al., 2023a, 2023b; Lucas, 2016). Through diagrams, this study explores various aspects of wayfinding through spatial reading. The findings are derived from an analysis and repositioning of existing architectural wayfinding knowledge.

3. Result

This section discusses the various possibilities for reading wayfinding carried out by actors in the *OLD* film using hidden clues. By mapping each actor’s interactions and the way they find their way to their goals, spatial narratives can be interpreted. In the discussion, various aspects such as architectural elements, time, and actors will be discussed. As shown in Figure 1, the *OLD* film’s context serves as the environment’s background. It illustrates the position and conditions created throughout the story of the film. This image is analyzed to gain an understanding of the spatial conditions and the existence of the resort, forest, and beach. Furthermore, hidden clues and aspects of wayfinding will be discussed.

This article uses the film *OLD* as a case study to illustrate how hidden clues can be used to narrate spatially.

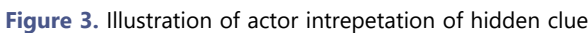


Figure 1. Sketch of background setting

3.1. Identifying hidden clues based on actor interpretation



Based on the events depicted in the film, each actor pursues the wayfinding process in their way. The majority of them are influenced by their work background and working conditions. To understand the hidden clues that are hidden, it is necessary to start by describing one by one the effects that occur to each actor. Meanwhile, actor Guy considers the context to be an integral part of identifying his hidden clues. In an attempt to describe the path he



took to reach the present location, he attempts to retrace his steps. Following that, he attempts to travel according to his memory of the route, but he is unable to reach his destination and is returned to his original location.

In this incident, it is evident that each actor has their method of finding hidden clues that are present under certain conditions. The life clues depicted in the story of this film are influenced by the actor's background, which is the background knowledge. Each actor can identify their clues differently, even in the same situation. Identification and wayfinding are dependent upon the information obtained and its absorption based on the actor's background.

Figure 3 illustrates how each actor identifies hidden clues through a perception-action process. A person's preconception of the phenomenon guides their search for wayfinding based on their understanding of the phenomenon. Every phenomenon that occurs becomes a hidden clue as each actor interprets it to find his or her way home.

3.2. Exploring hidden clues based on condition

In the OLD film, the spatial condition depicted is a beach background with sea, coral, and cliffs. In the process of locating hidden clues, this spatial condition is one aspect that is considered. How a group of people perceives the spatiality of their surroundings and utilizes what is available as a clue. An actor depicted in the film experiences confusion, alienation, and fear as a result of an unusual circumstance. This film depicts spatial conditions that are generally pleasant, but are very tense in the film. This condition also contains clues concerning time, as time passes so rapidly and the body ages biologically.

Hidden clues in the film demonstrate that certain conditions cause the actor to take action. In one scene, Kara climbs a rock cliff to find a way home, believing that by reaching the end of the cliff, he will be able to return home. In normal circumstances, this would be possible, but in this film, the cliff has no end, thus it represents the boundary between reality and the unreal. In Figure 4, Jarrin and Madox attempt to swim toward the end of the island with the hope of escaping and finding their way home. Eventually, he returned to the beach after finding several dead ends while swimming.

There is also the spatial setting of the resort, which initially appeared luxurious, magnificent, and pleasant, but was a condition created by the director as a gateway to an isolated beach. The actor was able to understand it as a wayfinding process as a result of this spatial condition. They assume that by finding the resort, they will be able to locate their way home. The spatial reading of a resort is erased by the confusion of locating a route, position, and orientation change, and cannot be re-established. It is then used as a hidden clue that the actor is far away from the resort which when they left, they considered a gateway.

3.3. Understanding hidden clues based on chronological order

This film's narrative is narrated chronologically beginning with a family vacationing at a resort, then visiting the beach by car. On arrival at the beach, the actors meet a number of other actors. There are several events in sequence, including changes in time, panic, death, experimenting with patterns, reading instructions, diving, and finding a way home. Based on this sequence, each chronology has its hidden clue, which the actor attempts to decode.

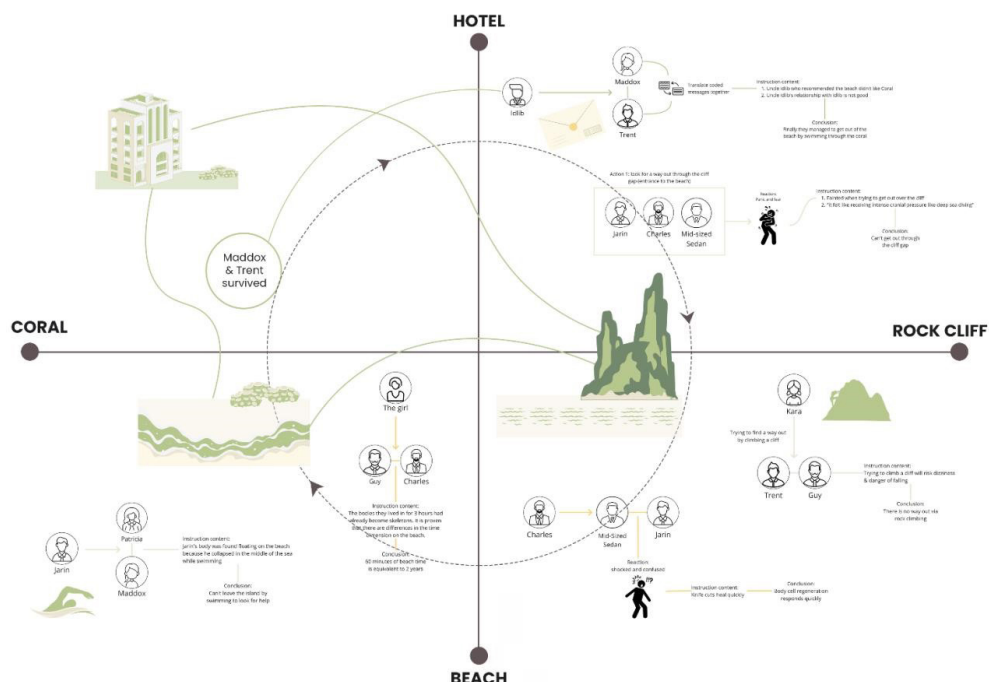


Figure 4. Exploring hidden clue based on conditions

a hidden clue or as a threat. As a result, when fast time allows movement, the actor implements a strategy in the form of compiling wayfinding actions, namely, immediately climbing the rock cliff. The actors who view it as a threat attempt to keep time from running too fast by analyzing changes. These two examples show that time can influence how space users carry out their wayfinding activities. Throughout the film, various objects are used to reveal wayfinding. There are hidden clues to the conditions on the beach in this film, found in the form of letters, scars, skulls, and cliff faces. The cues present in each scene in the film do not only pertain to one character, but to a number of them. Cues are initially given by one or more characters and then communicated to others. The identification process revealed that there are differences in how each character interprets cues. This suggests that objects may be a determinant of wayfinding through hidden clues.

This study shows three architectural elements that determine wayfinding: objects, boundaries, and time. It is possible to use objects to guide you in the process of spatial wayfinding. The concept of boundaries is in the context of finding a way based on hidden clues. In contrast, the time component provides a duration factor for individuals to respond and take action to achieve their goals. In presenting architectural wayfinding, these three aspects can be integrated into one approach that takes into account more than just physical clues.

5. Conclusions

This paper reveals three factors that contribute to the determination of a route based on hidden clues, namely objects, boundaries, and time. The three aspects are understood as aspects of wayfinding outside the physical spatial form of architecture. The results of this study contribute to the understanding of architectural wayfinding, which has traditionally been associated with physical and visual aspects (Lynch, 1960; Mustikawati et al., 2017, 2018), but now also includes non-physical aspects, including boundaries and time. Additionally, this paper illustrates the existence of hidden clues as part of the wayfinding process, where orientation was previously considered to be the most important factor. A wayfinding map shows hidden clues in the form of puzzles that can be arranged in a logical order. Certainly, this expands the presence of mapping as a tool for compiling information about a building and its surroundings. The map contains clues that can be used by users as a basis for traveling.

The findings of this study provide a basis for developing the concept of architectural wayfinding, which has been based on physical form and prioritized spatial acuity up to now. Non-physical aspects can be considered to present a more effective and easy-to-understand wayfinding. The non-physical aspects of road signs may consist of immaterial architecture that facilitates navigation. This paper focuses on one case study and explores various aspects of the art of wayfinding through spatial reading in films. However, this opens up opportunities for further

research in a variety of contexts and cases to enhance the discussion of wayfinding in architecture.

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